

## PATENT ABSTRACTS OF JAPAN

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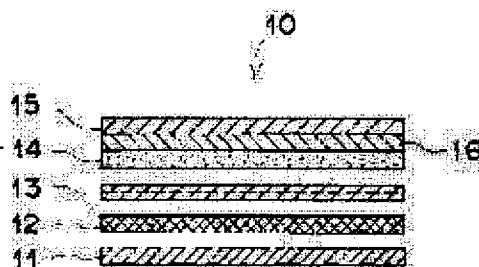
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### (54) STICKER FOR RECOGNIZING VEHICLE

#### (57)Abstract:

**PROBLEM TO BE SOLVED:** To easily perform discrimination of vehicle without depending on the number plate.

**SOLUTION:** This sticker 10 for recognizing vehicle is composed of a substrate layer 11 such as a white paper, a printed layer 12 which is formed on the upper surface of the substrate layer 11 and displays vehicle information containing a car number of the vehicle, a film layer 13 of self-destruction type which is formed on the upper surface of the printed layer 12 and contains a prescribed pattern such as a certification pattern, an adhesive layer 14 which is formed on the upper surface of the film layer 13 and a protective film layer 15 which is formed on the upper surface of the adhesive layer 14 together with a release agent layer 16 and is transparent. Therein, the protective film layer 15 is stripped and, thereby, the sticker 10 for recognizing vehicle is stuck to windbreak glass of the vehicle from the adhesive layer 14 side. If the sticker 10 for recognizing vehicle once stuck is stripped, the film layer 13 of self-destruction type is destroyed together with the prescribed pattern and, therefore, it is made impossible to reuse the sticker 10 for recognizing vehicle.



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**CLAIMS**

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**[Claim(s)]**

**[Claim 1]**A sticker for vehicle recognition characterized by comprising the following stuck inside saposhnikovia root glass of vehicles.

A support layer.

A printing layer showing vehicle information containing a fleet number of said vehicles formed in the upper surface of this support layer.

A self-destroyed type film layer containing a predetermined pattern formed in the upper surface of this printing layer.

An adhesive layer formed in the upper surface of this film layer, and a protective film layer formed in the upper surface of this adhesive layer with a release agent layer.

**[Claim 2]**A sticker for vehicle recognition characterized by comprising the following stuck inside saposhnikovia root glass of vehicles.

A protective film layer.

The 1st adhesive layer formed in the upper surface of said 1st field with the 1st release agent layer among the 1st and 2nd fields obtained by bisecting a field on this protective film layer.

A self-destroyed type film layer containing a predetermined pattern formed in the upper surface of this 1st adhesive layer.

A printing layer showing vehicle information containing a fleet number of said vehicles formed in the upper surface of this film layer, A support layer formed in the upper surface of said 2nd field with the 2nd release agent layer, the 2nd adhesive layer formed in the upper surface of said printing layer or said support layer, and a mold releasing film layer formed in the upper surface of this 2nd adhesive layer with the 3rd release agent layer.

**[Claim 3]**The sticker for vehicle recognition according to claim 2 characterized by

coming to form a bent part which classifies both fields in the approximately middle of said 1st field of said protective film layer, and said 2nd field.

[Claim 4]A sticker for vehicle recognition of three given in any 1 paragraph from claim 1, wherein a said autoclasis type film layer consists of hologram films.

[Claim 5]A sticker for vehicle recognition of four given in any 1 paragraph from claim 1, wherein heat transfer printing comes to form said printing layer in said support layer or said film layer.

[Claim 6]A sticker for vehicle recognition of five given in any 1 paragraph from claim 1, wherein said printing layer contains a bar code matched with said vehicle information.

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**DETAILED DESCRIPTION**

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[Detailed Description of the Invention]

[0001]

[Field of the Invention]This invention is stuck on the saposhnikovia root glass of vehicles, and relates to the sticker for vehicle recognition which has the function to recognize vehicles. Here, with saposhnikovia root glass, not only the windshield of vehicles but rear glass shall be included, and the windowpane of the side shall also be included further.

[0002]

[Description of the Prior Art]Conventionally, the number plate is attached before and after that at vehicles, and vehicles can be specified by referring to a number plate. In particular, vehicles may lead to the early detection of vehicles by [, such as a theft, ] referring to a number plate, when carried out.

[0003]

[Problem(s) to be Solved by the Invention]However, since a number plate is comparatively easy to remove, the theft only of the number plate may be carried out and this may be abused for a crime. If it is exchanged in a number plate when the theft of the vehicles is carried out, specification of theft vehicles will become impossible.

[0004]This invention is made in view of the above-mentioned situation, and it aims at providing the sticker for vehicle recognition which can identify vehicles easily simultaneously with a number plate and which cannot be altered.

[0005]

[Means for Solving the Problem]As for the 1st sticker for vehicle recognition by this invention, this invention is characterized by that a sticker for vehicle recognition stuck inside saposhnikovia root glass of vehicles comprises the following.

A support layer which consists of plastic films, such as paper or VCM/PVC, etc.

A printing layer showing vehicle information containing a fleet number of said vehicles formed in the upper surface of this support layer.

A self-destroyed type film layer containing a predetermined pattern formed in the upper surface of this printing layer.

An adhesive layer formed in the upper surface of this film layer, and a protective film layer formed in the upper surface of this adhesive layer with a release agent layer.

[0006]As for the 2nd sticker for vehicle recognition by this invention, this invention is characterized by that a sticker for vehicle recognition stuck inside saposhnikovia root glass of vehicles comprises the following.

Protective film layer.

The 1st adhesive layer formed in the upper surface of said 1st field with the 1st release agent layer among the 1st and 2nd fields obtained by bisecting a field on this protective film layer.

A self-destroyed type film layer containing a predetermined pattern formed in the upper surface of this 1st adhesive layer.

A printing layer showing vehicle information containing a fleet number of said vehicles formed in the upper surface of this film layer, A support layer which consists of plastic films etc. which were formed in the upper surface of said 2nd field with the 2nd release agent layer, such as paper or VCM/PVC, The 2nd adhesive layer formed in the upper surface of said printing layer or said support layer, and a mold releasing film layer formed in the upper surface of this 2nd adhesive layer with the 3rd release agent layer.

[0007]Here, it means [ "it is stuck inside saposhnikovia root glass", and ] that it can stick inside glass of in front of vehicles or the back at least.

[0008]A mark of a government office which manages a fleet number of the District Land Transport Bureau etc., a mark showing what was attested by government office, an attestation pattern, etc. can be included in "a predetermined pattern."

[0009]in addition -- in the 2nd sticker for vehicle recognition by this invention -- said 1st field and said 2nd field of said protective film layer -- abbreviated -- it is preferred to come to form bent parts, such as perforations which consider it as the same size and classify both fields in the approximately middle.

[0010]In the 1st and 2nd stickers for vehicle recognition by this invention, it is preferred that a said autoclasis type film layer consists of hologram films.

[0011]In the 1st and 2nd stickers for vehicle recognition by this invention, it is preferred that heat transfer printing comes to form said printing layer in said support layer or said film layer. A printing layer may be formed with other printing methods, such as not only heat transfer printing but ink jet printing.

[0012]As for said printing layer, it is preferred that it is a thing containing a bar code matched with the vehicle information other than said vehicle information.

[0013]

[Effect of the Invention]The 1st sticker for vehicle recognition by this invention is stuck on the position considered as the request of saposhnikovia root glass from the adhesive layer side by removing a protection film.

[0014]A printing layer and a support layer paste up the 2nd sticker for vehicle recognition by this invention by the 2nd adhesive layer by making peel-off and the 1st and 2nd fields the mold releasing film layer formed in the upper surface of a printing layer or a support layer correspond mutually, and bending a protective film layer. Then, by removing the protective film layer of the 1st field, the sticker for vehicle recognition is stuck on the position considered as the request of the saposhnikovia root glass of vehicles from the 1st adhesive layer side, and pasting of the sticker for vehicle recognition is completed by removing and removing the protective film layer of the 2nd field further.

[0015]Thus, since the vehicle information containing a fleet number can be easily stuck on saposhnikovia root glass according to the sticker for vehicle recognition of this invention, the same fleet number as a number plate can be displayed on saposhnikovia root glass in the mode which cannot be altered.

[0016]Since the sticker for vehicle recognition is stuck from the inside of saposhnikovia root glass, any persons other than persons with authority, such as an owner of vehicles, cannot touch the sticker for vehicle recognition. Since the self-destroyed type film layer is used, it it removes the once stuck sticker for vehicle recognition, the predetermined pattern which a film layer is destroyed and is contained in this is also destroyed, and, as a result, the reuse of a sticker becomes impossible. Therefore, if a government office with authority, such as the District Land Transport Bureau, publishes the sticker for vehicle recognition by this invention with the number plate of vehicles and imposes a duty of pasting of the sticker for vehicle recognition at the time of registration of vehicles, When a number plate is removed or it exchanges unlawfully, a number plate and the fleet number contained in the sticker for vehicle recognition stuck on vehicles stop being in agreement. Therefore, it becomes possible the theft of a number plate, and to prevent crimes, such as a theft of vehicles, beforehand further.

[0017]In the 2nd sticker for vehicle recognition by this invention, the bent part which classifies both fields is formed in the approximately middle of the 1st field in a protective film layer, and the 2nd field, By bending a protective film layer in a bent part, the alignment of a printing layer and a support layer becomes easy, and, as a result, pasting to the saposhnikovia root glass of the 2nd sticker for vehicle recognition by this invention can be performed easily.

[0018]In the 1st and 2nd stickers for vehicle recognition by this invention, By using a film layer as a hologram film, the attestation pattern showing what was attested by government offices, such as the District Land Transport Bureau, can be included in the sticker for vehicle recognition in the mode which cannot be easily copied as a

predetermined pattern. Therefore, forgery of the sticker for vehicle recognition by this invention can be prevented.

[0019]A printing layer can be easily formed by forming a printing layer in a support layer or a film layer with printing methods, such as heat transfer printing.

[0020]By including the bar code matched with vehicle information in the printing layer, It makes it easy to read a fleet number automatically with the remote bar code reader from the outside of a car, etc., and it also becomes possible to use for the entry check to record of the in-and-out vehicles in tollgates, such as a highway, management of receipts and payments of the car of a pay parking lot, and the hall of a membership system, etc.

[0021]

[Embodiment of the Invention]With reference to drawings, the embodiment of this invention is described below. The top view and drawing 2 in which the composition of the sticker for vehicle recognition according [ drawing 1 ] to a 1st embodiment of this invention is shown are the sectional view. As shown in drawing 1 and drawing 2, this invention is characterized by the sticker 10 for vehicle recognition by a 1st embodiment comprising the following.

Support layer 11.

The printing layer 12 showing vehicle information formed in the upper surface of the support layer 11.

The self-destroyed type film layer 13 formed in the upper surface of the printing layer 12.

The adhesive layer 14 formed in the upper surface of the film layer 13, and the protective film layer 15 formed in the upper surface of the adhesive layer 14 with the release agent layer 16.

In drawing 2, although there is a part which is made to separate each class and is illustrated, each class has stuck actually.

[0022]Plastic films, such as white paper or VCM/PVC, etc. are used so that it may tend to recognize visually the vehicle information expressed by the printing layer 12, when the support layer 11 sticks the sticker for vehicle recognition by this embodiment on the saposhnikovia root glass of vehicles.

[0023]The printing layer 12 is formed by printing the vehicle information containing a fleet number to the film layer 13 by heat transfer printing. In this embodiment, the bar code matched with vehicle information by vehicle information with the fleet number is included in the printing layer 12. It may replace with heat transfer printing and other printing methods, such as ink jet printing, may be used.

[0024]the film layer 13 – a bright film – it is more preferably constituted by the hologram film. Here, in this embodiment, although "Japan" and the character of "2001" are included in the film layer 13 as a predetermined pattern, the mark of government offices,

such as the District Land Transport Bureau, may be included in the film layer 13 as a predetermined pattern. By using a hologram film, it can be made to be able to contain in the film layer 13 in the mode which cannot copy easily the signs for attestation that what was attested by government offices, such as the District Land Transport Bureau, is expressed, and, thereby, forgery of the sticker 10 for vehicle recognition by this embodiment can be prevented. Since it can recognize easily by reflection of light, even if signs that it is based on a hologram film are night, they can recognize the existence of attestation easily by using light.

[0025]Although the adhesive layer 14 is constituted by usually coating a binder, a double-sided tape can also constitute it. When the sticker once stuck on the saposhnikovia root glass of vehicles is removed as the adhesive layer 14, the thing of the adhesive power which is the grade that the film layer 13 can self-destroy is used.

[0026]The protective film layer 15 consists of a film of transparent construction material. A release agent is applied to the protective film layer 15, and the release agent layer 16 is formed. Separation with the adhesive layer 14 and the protective film layer 15 becomes easy by this release agent layer 16. Since the adhesive layer 14 is protected by the protective film layer 15, contamination of the adhesive layer 14 is prevented and, thereby, the visibility of the printing layer 12 improves.

[0027]The sticker 10 for vehicle recognition by a 1st embodiment of this invention constituted in this way is stuck on the position considered as the request of the saposhnikovia root glass of vehicles from the adhesive layer 14 side by removing the protective film layer 15.

[0028]Subsequently, a 2nd embodiment of this invention is described. Drawing 3 is a sectional view showing the composition of the sticker for vehicle recognition by a 2nd embodiment of this invention. As shown in drawing 3, the sticker 20 for vehicle recognition by a 2nd embodiment, The 1st adhesive layer 32 formed in the upper surface of the 1st field 30 with the 1st release agent layer 31 among the 1st and 2nd fields 30 and 40 obtained by abbreviated-bisecting the field on the protective film layer 21 and the protective film layer 21, The self-destroyed type film layer 33 formed in the upper surface of the 1st adhesive layer 32, The printing layer 34 showing the vehicle information formed in the upper surface of the film layer 33, and the support layer 42 formed in the upper surface of the 2nd field 40 with the 2nd release agent layer 41, It consists of the 2nd adhesive layer 43 formed in the upper surface of the support layer 42, and the mold releasing film layer 45 formed in the upper surface of the 2nd adhesive layer 43 with the 3rd release agent layer 44. The 2nd adhesive layer, 3rd release agent layer, and mold releasing film layer 45 may be formed in the upper surface of the printing layer 34. In drawing 3, although there is a part which is made to separate each class and is illustrated, each class has stuck actually.

[0029]The protective film layer 21 consists of a film of transparent construction material



like the protective film layer 15 in a 1st embodiment. A release agent is applied to the protective film layer 21, and the 1st and 2nd release agent layers 31 and 41 are formed.

[0030]Although the 1st and 2nd adhesive layers 32 and 43 are constituted by usually coating a binder like the adhesive layer 14 in a 1st embodiment, a double-sided tape can also constitute them. When the sticker once stuck on the saposhnikovia root glass of vehicles is removed as the 1st adhesive layer 32, the thing of the adhesive power which is the grade that the film layer 33 can self-destroy is used.

[0031]The film layer 33 has the same composition as the film layer 13 in a 1st embodiment.

[0032]The printing layer 34 has the same composition as the printing layer 12 in a 1st embodiment.

[0033]Plastic films, such as white paper or VCM/PVC, etc. are used so that it may tend to recognize visually the vehicle information expressed by the printing layer 34, when the support layer 42 sticks the sticker for vehicle recognition by this embodiment on the saposhnikovia root glass of vehicles like the support layer 11 in a 1st embodiment.

[0034]A release agent is applied to the mold releasing film layer 45, and the 3rd release agent layer 44 is formed. Separation with the adhesive layer 43 and the mold releasing film layer 45 becomes easy by this 3rd release agent layer 44. Since the 2nd adhesive layer 43 is protected by the mold releasing film layer 45, contamination of the 2nd adhesive layer 43 is prevented and, thereby, the visibility of the printing layer 34 at the time of constituting the sticker for vehicle recognition by a 2nd embodiment improves.

[0035]The bent parts 22, such as a perforation part, are formed in the position which classifies the 1st and 2nd fields 30 and 40 into the protective film layer 21.

[0036]The sticker 20 for vehicle recognition by a 2nd embodiment of this invention constituted in this way, The 1st and 2nd fields 30 and 40 are made for the mold releasing film layer 45 formed in the upper surface of the support layer 42 to correspond to peel-off and drawing 4 mutually so that it may be shown, The printing layer 34 and the support layer 42 paste up by the 2nd adhesive layer 43 by bending the protective film layer 21 in the bent part 22 so that the printing layer 34 and the support layer 42 which were formed in each fields 30 and 40 may serve as the inside. Here, the alignment of the printing layer 34 and the support layer 42 becomes easy by bending the protective film layer 21 in the bent part 22.

[0037]Then, by removing the protective film layer 21 of the 1st field 30, The sticker for vehicle recognition is stuck on the position considered as the request of the saposhnikovia root glass of vehicles from the 1st adhesive layer 32 side, and pasting of the sticker 20 for vehicle recognition is completed by removing and removing the protective film layer 21 of the 2nd field 40 further.

[0038]Thus, according to the stickers 10 and 20 for vehicle recognition by 1st and 2nd

embodiments, since the information about vehicles can be easily stuck on saposhnikovia root glass, the same fleet number as a number plate can be displayed on saposhnikovia root glass in the mode which cannot be altered.

[0039]Since the stickers 10 and 20 for vehicle recognition are stuck from the inside of saposhnikovia root glass, any persons other than persons with authority, such as an owner of vehicles, cannot touch the stickers 10 and 20 for vehicle recognition. Since the self-destroyed type film layers 13 and 33 are used, if the once stuck stickers 10 and 20 for vehicle recognition are removed, The film layers 13 and 33 are destroyed, the mark of the attestation pattern by the hologram contained in this or a government office is also destroyed, and, as a result, the reuse of a sticker becomes impossible. Therefore, if a government office with authority, such as the District Land Transport Bureau, publishes the stickers 10 and 20 for vehicle recognition with the number plate of vehicles and imposes a duty of pasting to the saposhnikovia root glass of the stickers 10 and 20 for vehicle recognition at the time of registration of vehicles, When a number plate is removed or it exchanges unlawfully, a number plate and the fleet number contained in the stickers 10 and 20 for vehicle recognition stuck on vehicles stop being in agreement. Therefore, it becomes possible the theft of a number plate, and to prevent crimes, such as a theft of vehicles, beforehand further.

[0040]According to the registration fiscal year of vehicles, it becomes easy [discernment of a registration fiscal year] by changing the color of vehicle information, the color of the support layer 11, and the color of the film layers 13 and 33.

[0041]By including the bar code matched with vehicle information in the printing layers 12 and 34, It makes it easy to read a fleet number automatically with the remote bar code reader from the outside of a car, etc., and it also becomes possible to use for the entry check to record of the in-and-out vehicles in tollgates, such as a highway, management of receipts and payments of the car of a pay parking lot, and the hall of a membership system, etc.

[0042]In 1st and 2nd embodiments of the above, although vehicle information is printed to the film layers 13 and 33 and the printing layers 12 and 34 are formed in them, vehicle information may be printed to the support layers 11 and 42, and the printing layers 12 and 34 may be formed.

[0043]In 1st and 2nd embodiments of the above, as long as a fleet number is included, the term of validity of an automobile inspection, an insurance number, an insurance-company name, an effective date, the registration-papers number of vehicles, etc. may be included in the printing layers 12 and 34 as vehicle information.

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[Translation done.]